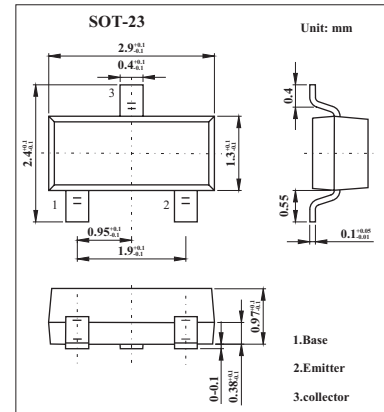


Silicon PNP Epitaxial Type

2SA1312

■ Features

- High voltage.
- High hFE.
- Low noise.
- Small package.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	-120	V
Collector-emitter voltage	V _{CE0}	-120	V
Emitter-base voltage	V _{EB0}	-5	V
Collector current	I _c	-100	A
Base current	I _B	-20	A
Collector dissipation	P _c	150	W
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I _{cBO}	V _{CB} = -120V, I _E = 0			-0.1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = -5V, I _c = 0			-0.1	μA
DC current Gain	h _{FE}	V _{CE} = -6V, I _c = -2mA	200		700	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c = -10mA, I _B = -1mA			-0.3	V
Gain bandwidth product	f _T	V _{CE} = -6V, I _c = -1mA		100		MHz
Output capacitance	C _{ob}	V _{CB} = -10V, f = 1MHz		4		pF
Noise figure	N _F	V _{CE} = -6 V, I _c = -0.1 mA, f = 100 Hz, R _g = 10 KΩ		0.5	6	dB
	N _F	V _{CE} = -6 V, I _c = -0.1 mA, f = 1 kHz, R _g = 10 KΩ		0.2	3	dB

■ hFE Classification

Marking	ABG	ABL
Rank	GR	BL
hFE	200~400	350~700